



THE UNITED STATES OF AMERICA  
DO hereby certify that

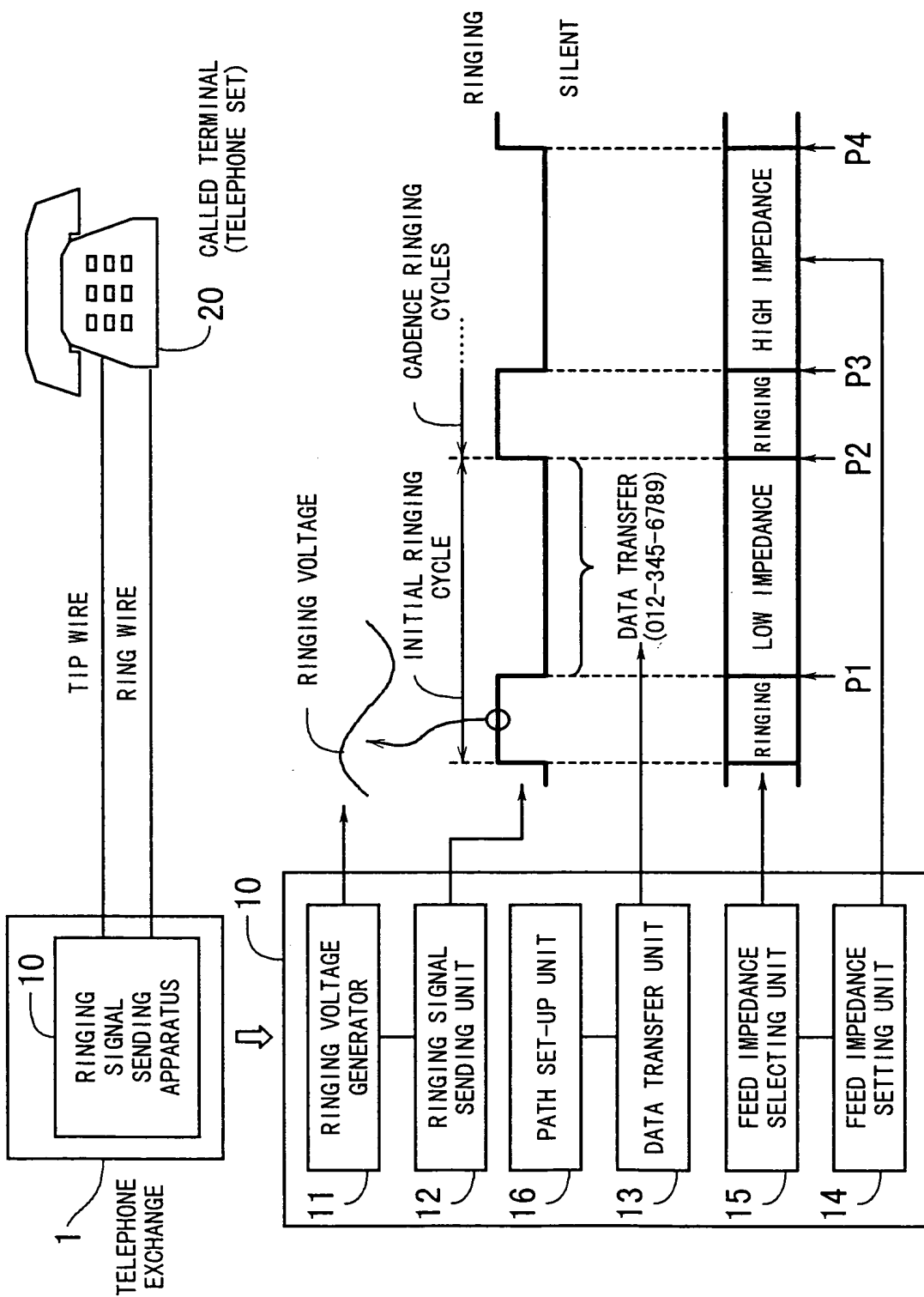
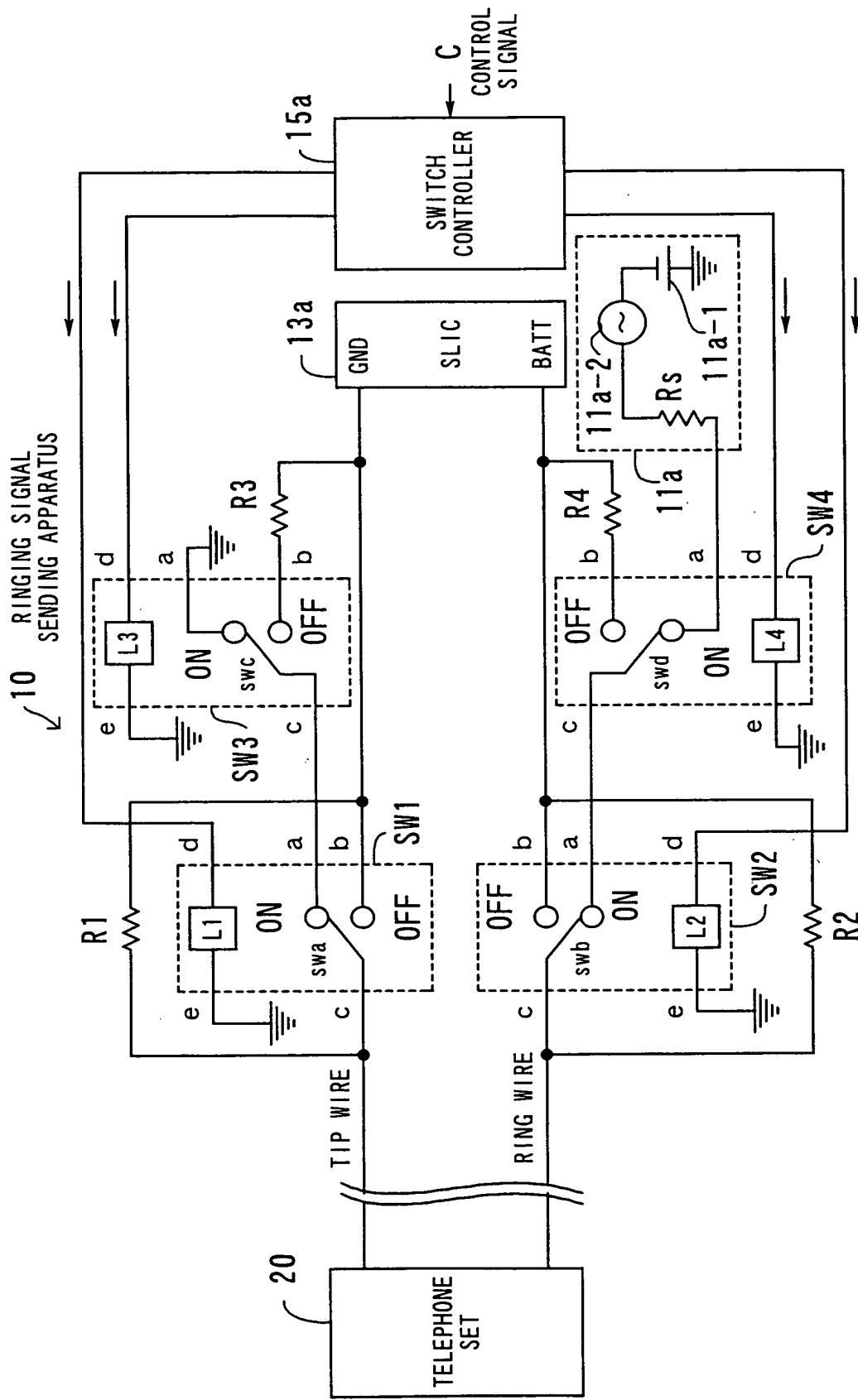
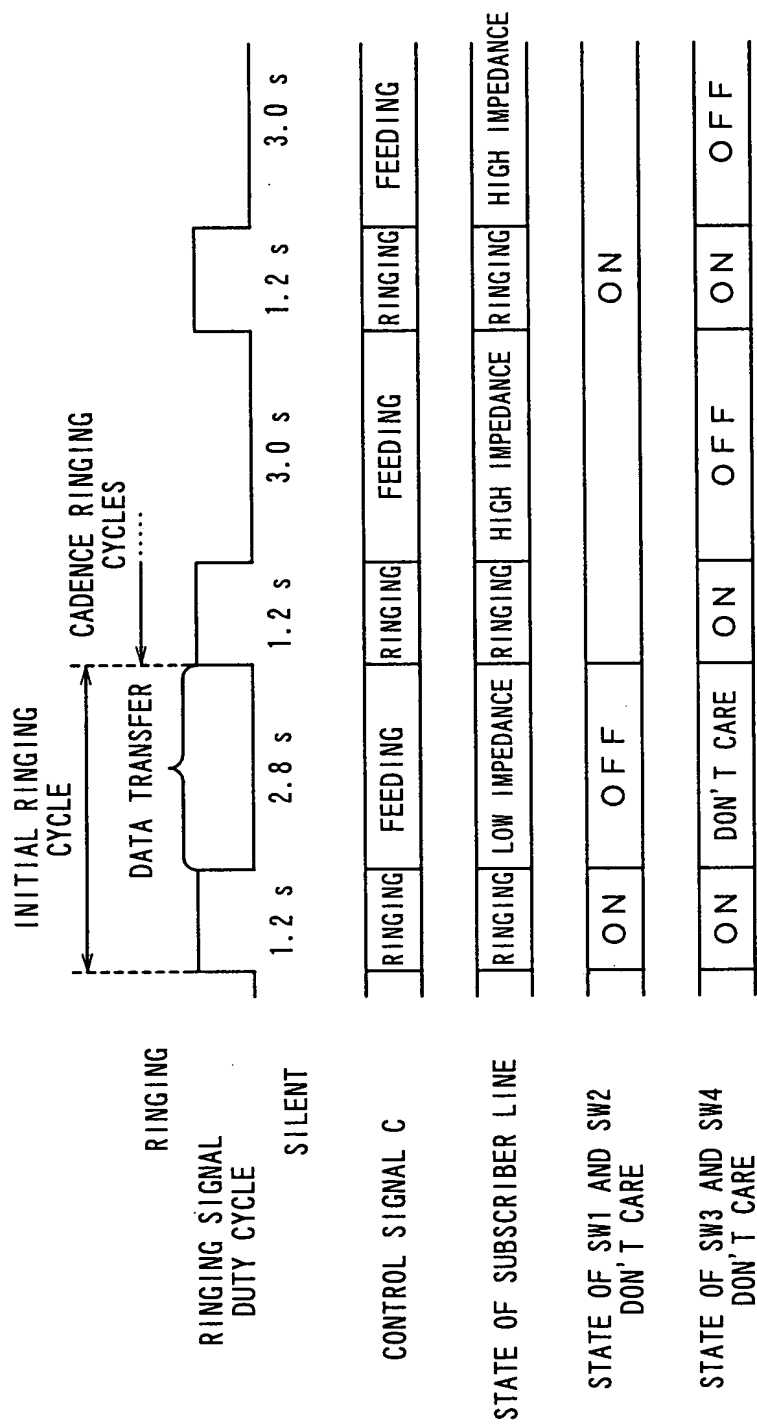


FIG. 1









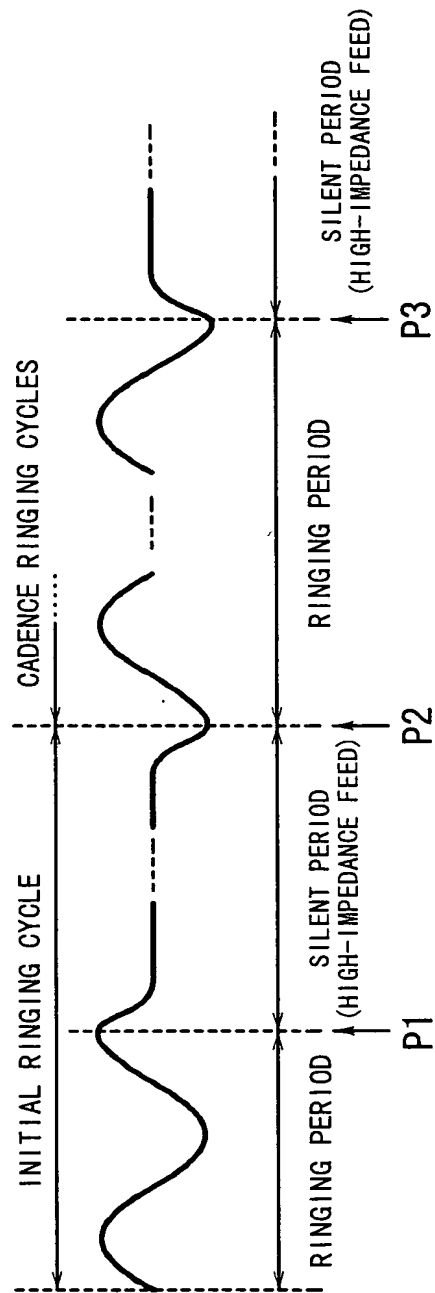


FIG. 6

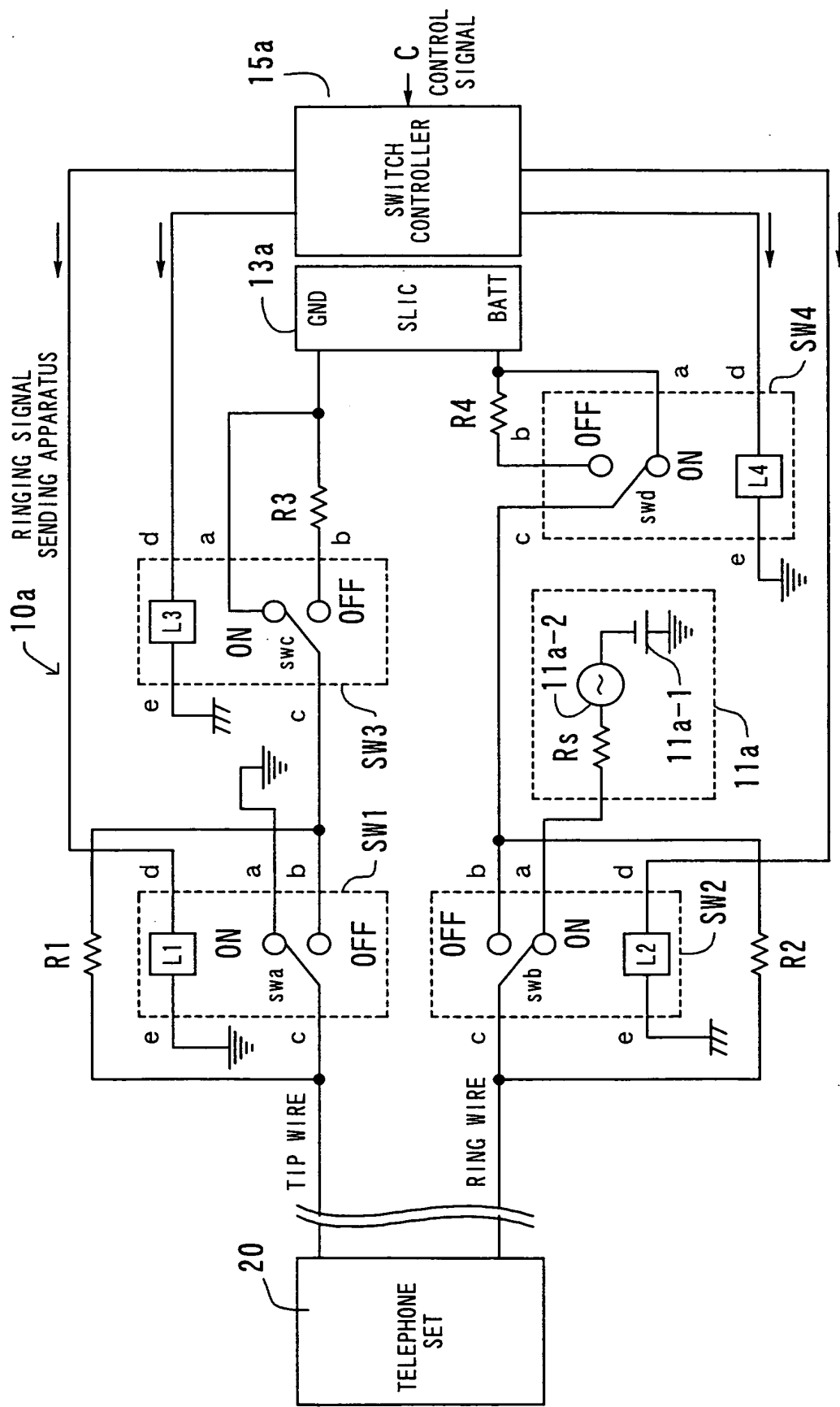


FIG. 7



## FIG. 8(A)

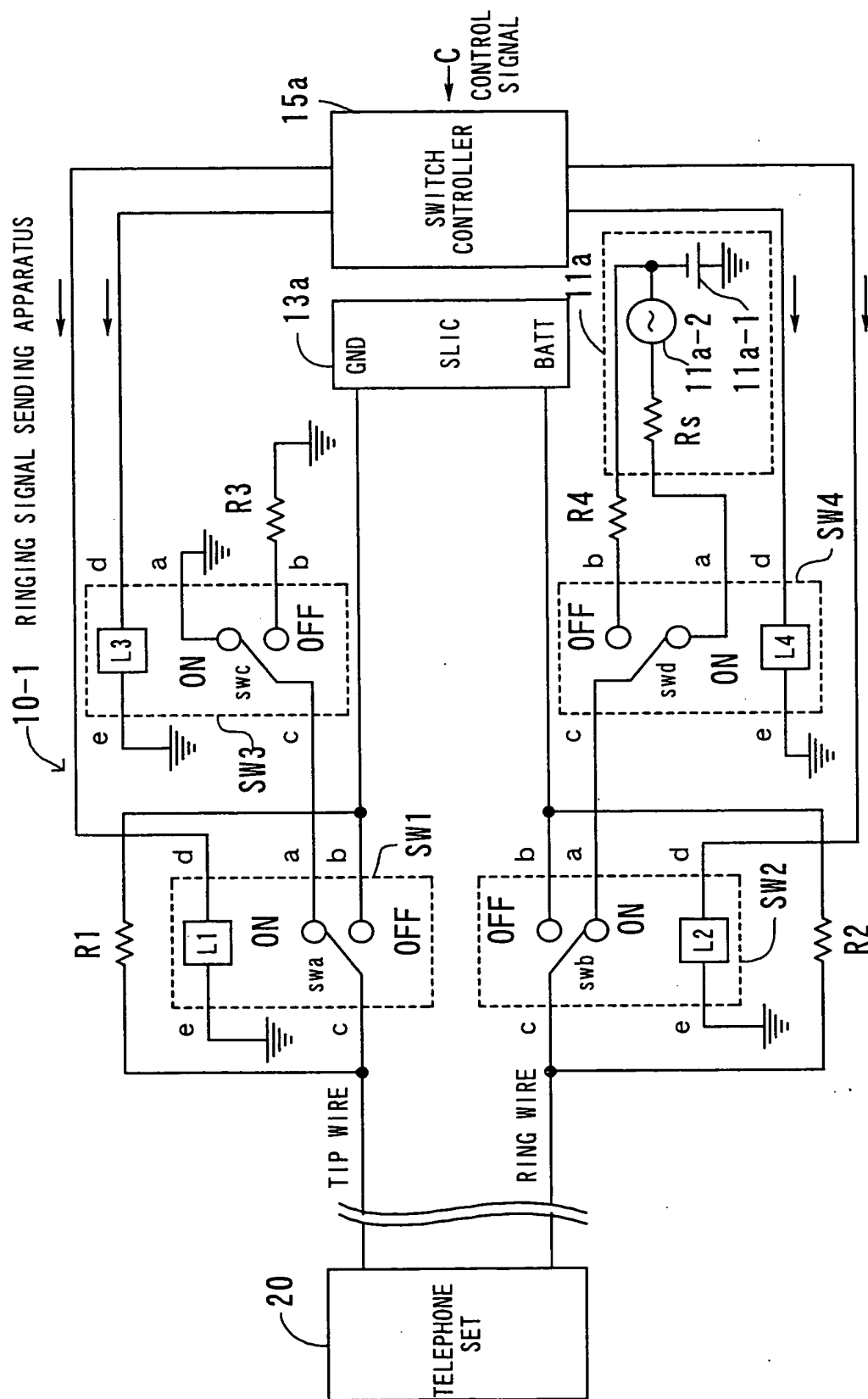
(A) RINGING SIGNAL SENDING APPARATUS 10

	RELAY SWITCHES SW1 AND SW2	RELAY SWITCHES SW3 AND SW4
RINGING	ON	ON
LOW-IMPEDANCE FEED	OFF	DON' T CARE
HIGH-IMPEDANCE FEED	ON	OFF

## FIG. 8(B)

(B) RINGING SIGNAL SENDING APPARATUS 10a

	RELAY SWITCHES SW1 AND SW2	RELAY SWITCHES SW3 AND SW4
RINGING	ON	DON' T CARE
LOW-IMPEDANCE FEED	OFF	ON
HIGH-IMPEDANCE FEED	OFF	OFF



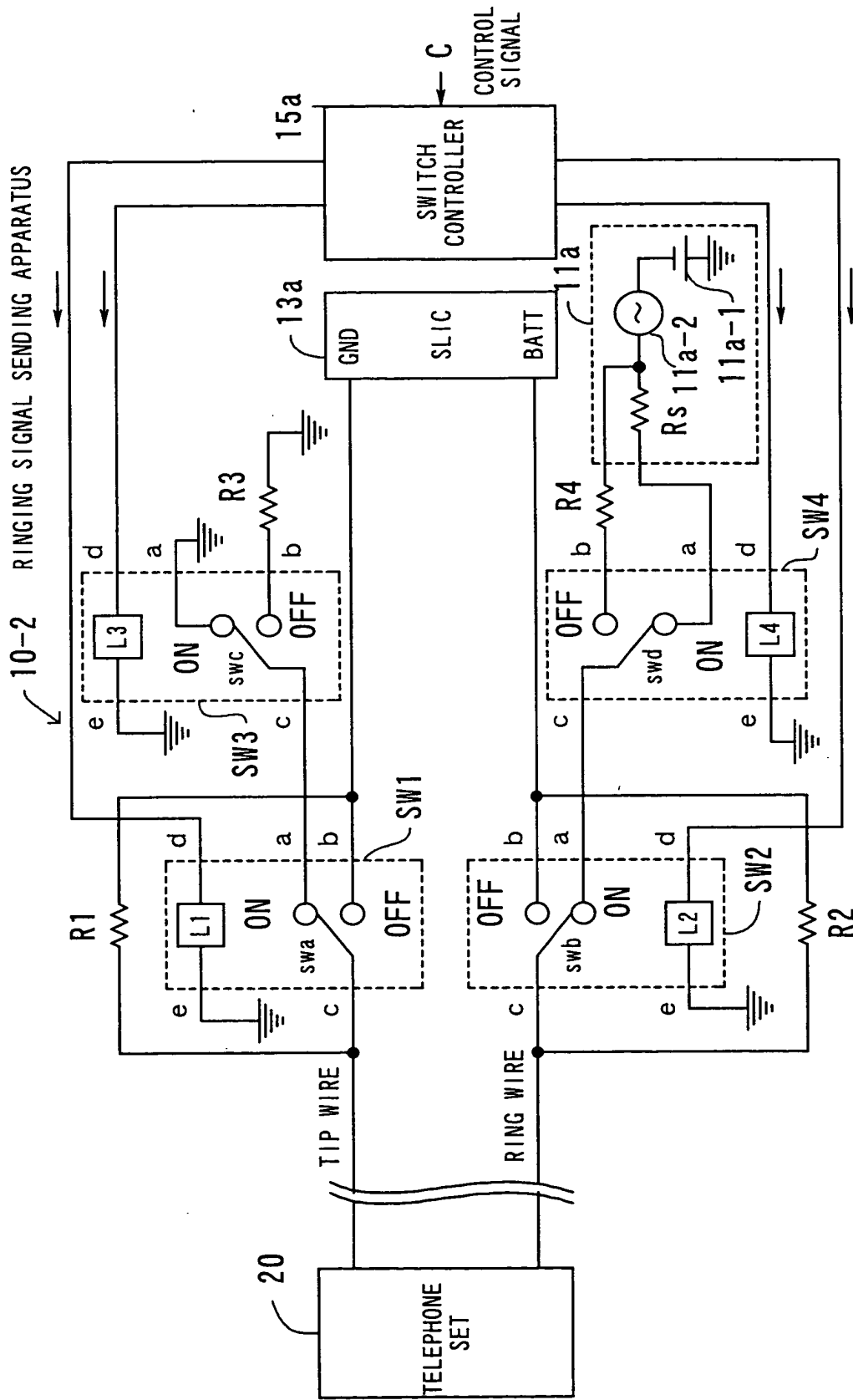


FIG. 10

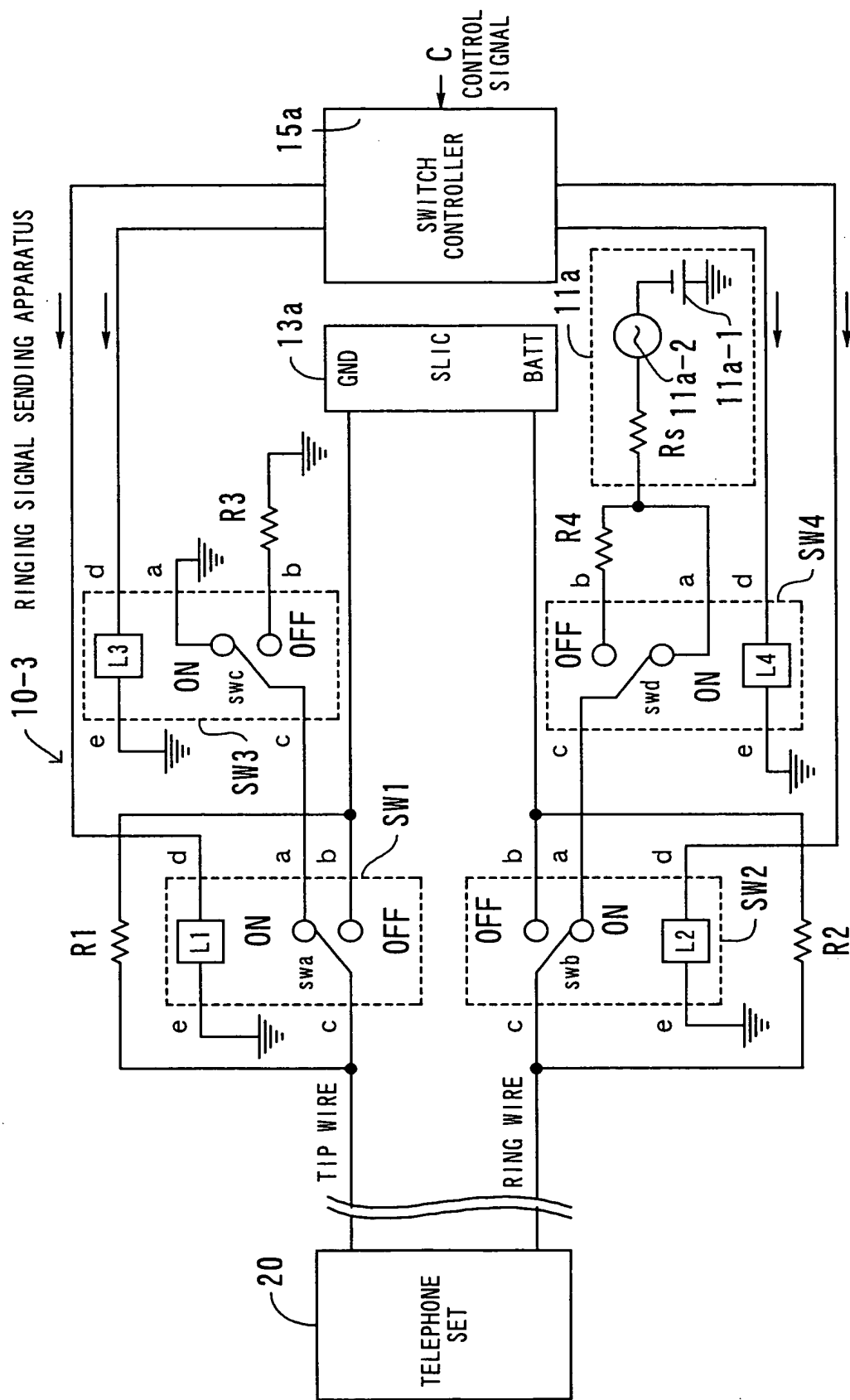


FIG. 11

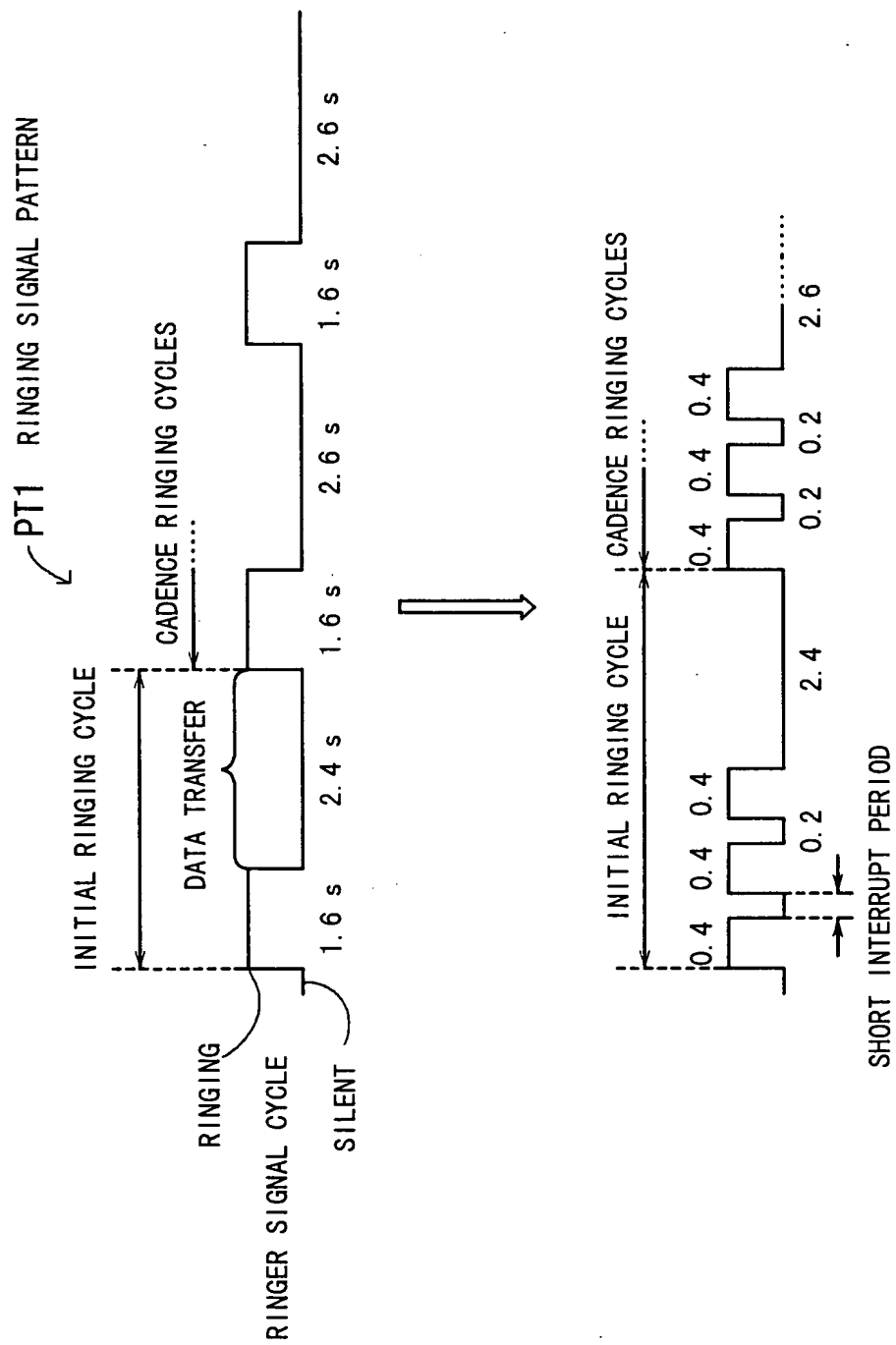


FIG. 12





[illegible]

CONTROL SIGNAL C	RINGING	FEED-ING	RINGING	FEED-ING	RINGING	FEED-ING	RINGING

[illegible]

STATE OF SW1 AND SW2  
DON'T CARE

NO

STATE OF SW3 AND SW4 DON'T CARE	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON
	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON

H: HIGH IMPEDANCE  
L: LOW IMPEDANCE

**FIG. 15**



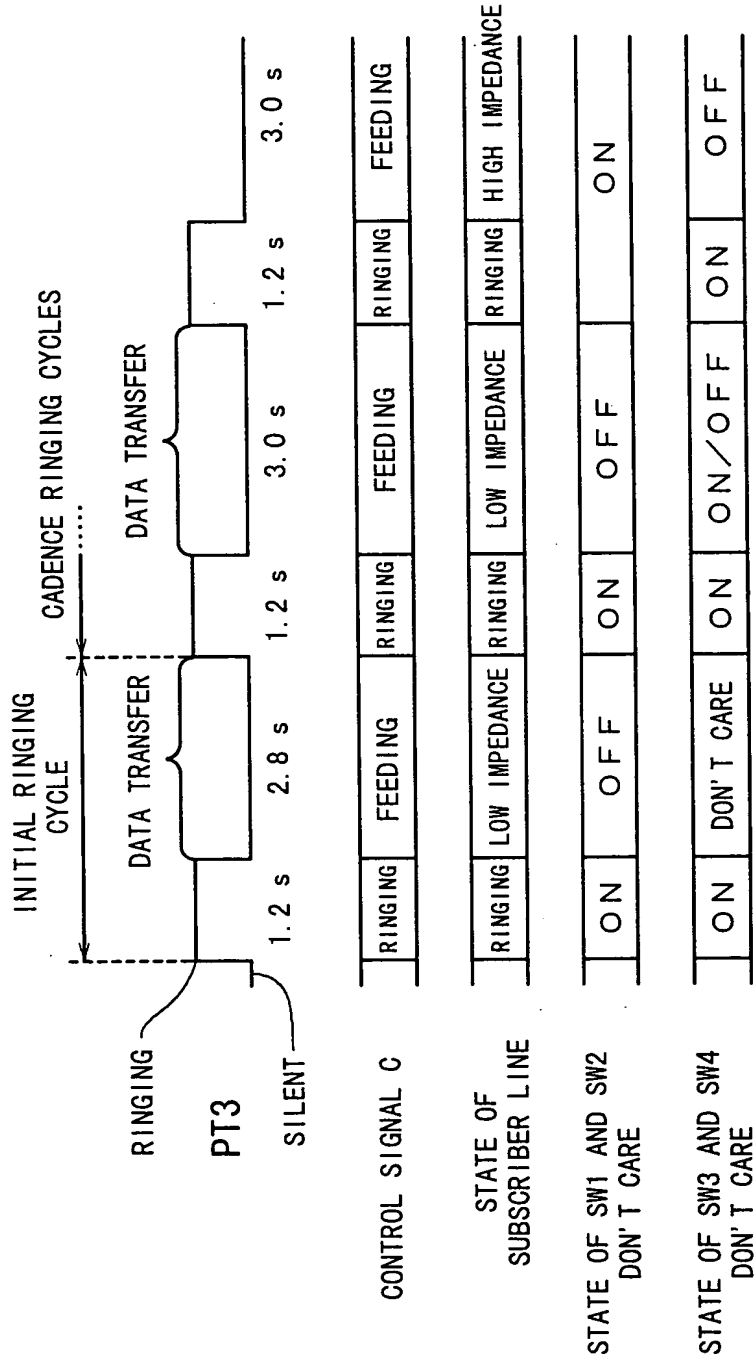


FIG. 16

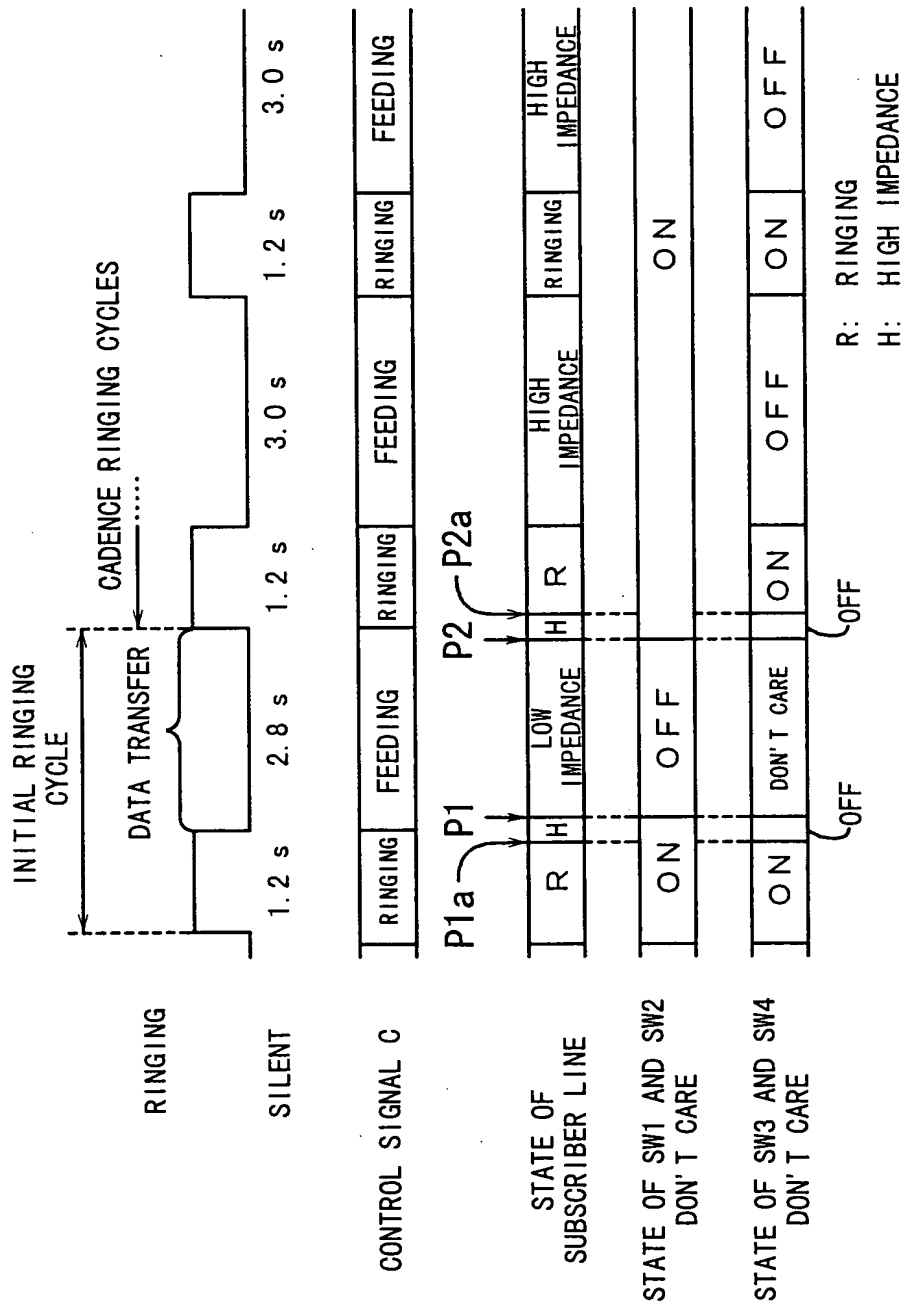
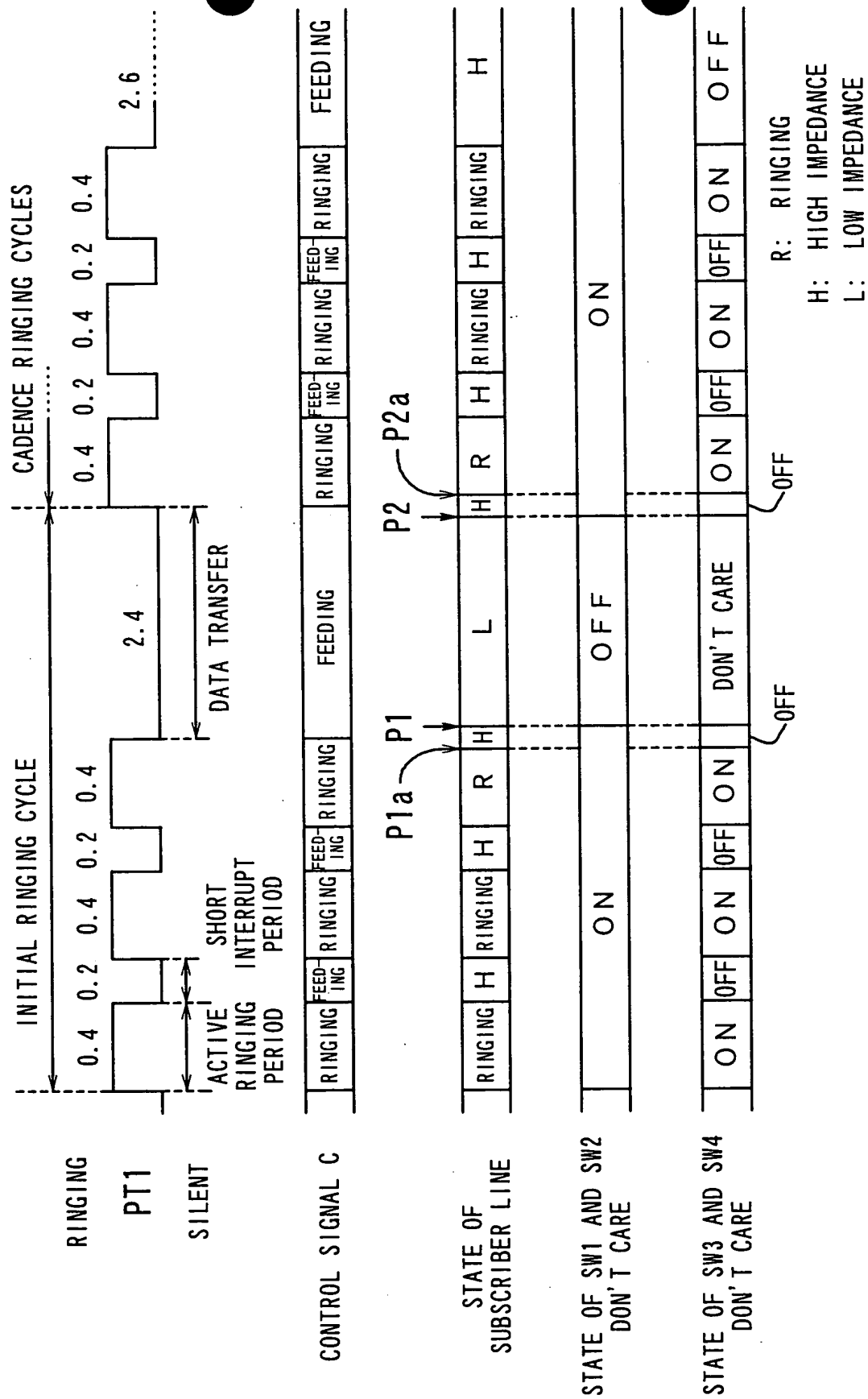


FIG. 17



**FIG. 18**

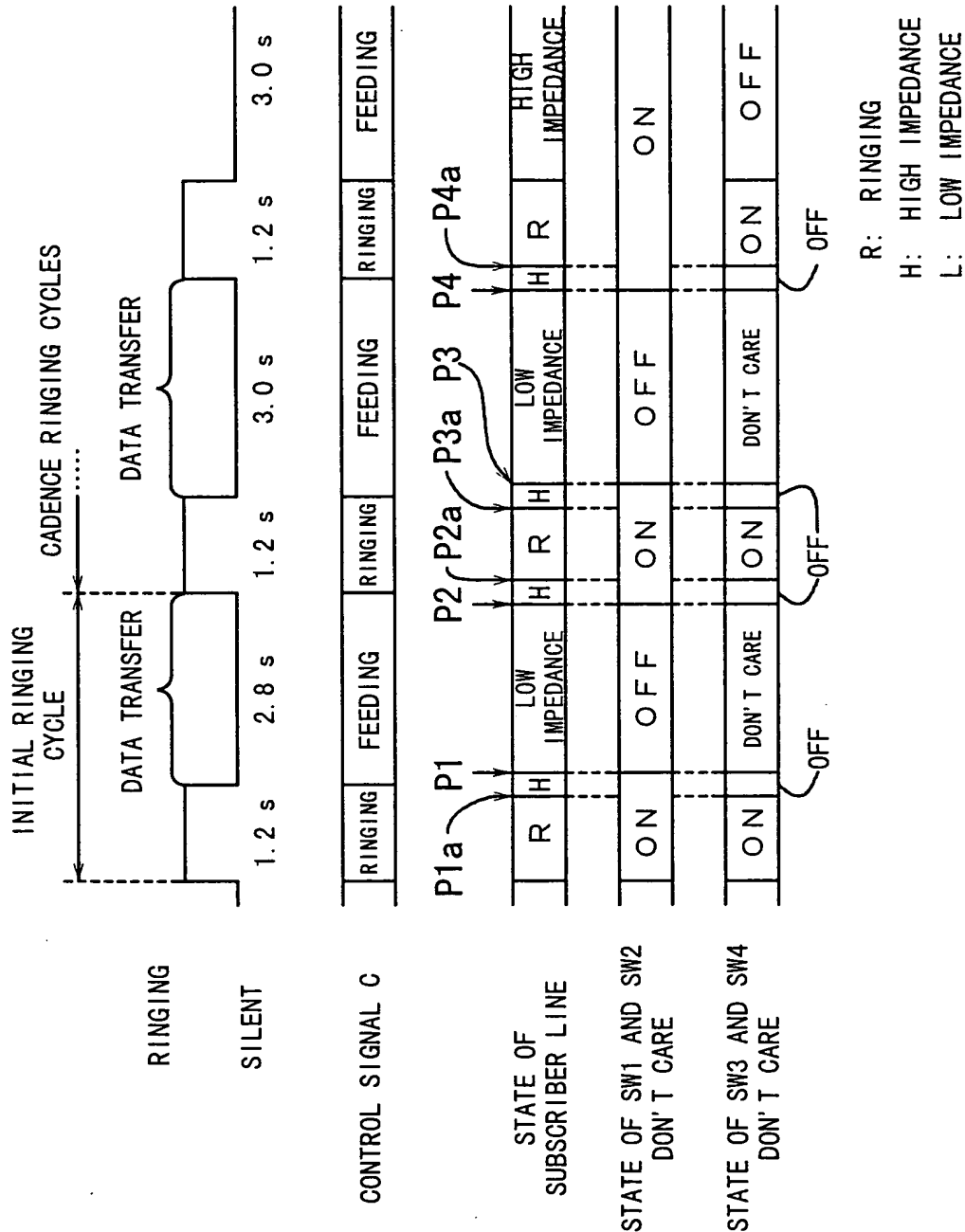


FIG. 19



TIP WIRE (A WIRE)

RING WIRE (B WIRE)

20 TELEPHONE SET

